

Science Welcome Message

The Science Department at Cowley International College can't wait to welcome you to your Year 7 Science lessons in September. In Secondary School you will study Science as three separate subjects:

- **Biology** - The study of living creatures.
- **Chemistry** - The study of chemical reactions.
- **Physics** - The study of forces, energy and matter. It includes mechanics, heat, light and other radiation, sound, electricity, magnetism, and the structure of atoms.

What will you learn in KS3?

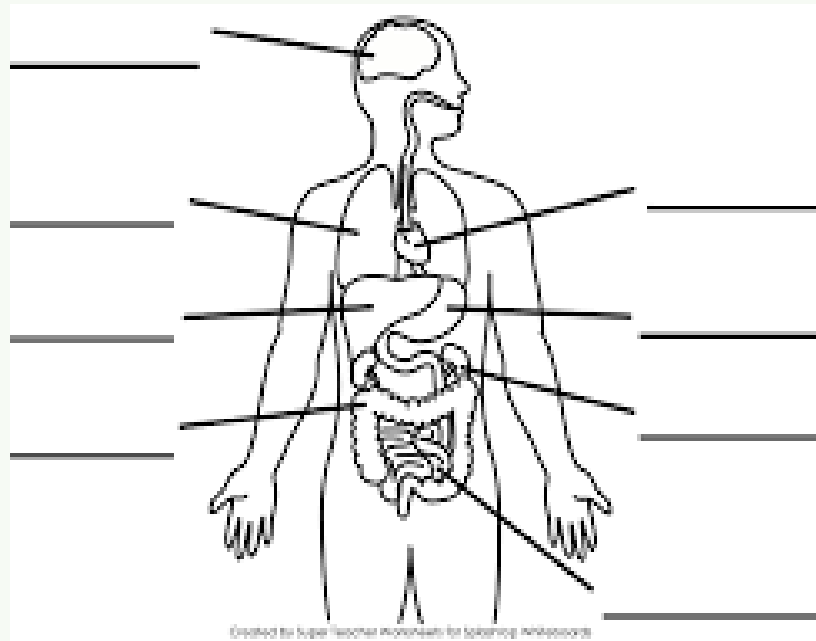
COWLEY INTERNATIONAL COLLEGE LOWER SCHOOL LEARNING

SCIENCE



Biology Activities 1 – Living Systems

Task 1: Label the organs of the human body



Task 2: The human body has many body systems. Each body system is made up of different parts. For each of the body systems below, name 3 body parts that work as part of that system

The Digestive System

- 1
- 2
- 3

The Muscular System

- 1
- 2
- 3

The Respiratory System

- 1
- 2
- 3

The Skeletal System

- 1
- 2
- 3

Task 3: In the space below draw a plant, and label as many parts of it as you can.

Task 4: At Cowley, you will be using Light Microscopes to look at Animal and Plant Cells. Use to space to describe the history of the Light Microscope. When was the light microscope invented? Who invented the light microscope?

Chemistry Activities 1 – Atoms and Elements

Task 1: Go to the website and find your birthday.

<https://edu.rsc.org/resources/collections/on-this-day-in-chemistry>

1 - What scientific event happened on your birthday?

2 - Who did it involve?

3- What did they do/discover/create?

Task 2: Draw a picture of an atom in the space below.

One interesting fact about atoms is...

Task 3: In Science, there are three types of matter, solids, liquids and gases.

Things I know about SOLIDS

1

2

3.

EXAMPLES OF SOLIDS ARE...

Things I know about LIQUIDS

1

2

3.

EXAMPLES OF LIQUIDS ARE...

Things I know about GASES

1

2

3.

EXAMPLES OF GASES ARE...

Physics Activities 1 – Forces and motion

Task 1: When a **force** acts on an object several different things might happen. The object might change shape, change size or change speed/direction. **Suggest what you think might happen to the objects in the situations below.**

a) A child puts a toy car at the top of a ramp and lets go. What happens next?

Name of Force =

b) A woman throws a ball up into the air. What happens next?

Name of Force =

c) A strong wind blows against a boat's sail, but the waves slow it down. What happens next?

Name of Force =

Task 2: Calculating speed. Use the information below to work out how fast each animal was moving. You can always use a calculator in science.

$$\text{Speed} = \text{distance moved} \div \text{time taken}$$

Dog: A dog ran 15m around the garden in 5 seconds.

Speed = m/s

Mouse: A mouse ran the 10 m from the lounge to the kitchen in 4 seconds. **Speed** = m/s

Fish: A fish swam 2 metres in 40 seconds. **Speed** = m/s

Bird: It took 2 minutes for a bird to fly across a field that was 2000m wide. **Speed** = m/s

Which animal was the fastest?

Task 3: Research the Solar System. Use the space below to record interesting facts about our Solar System.

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